I claim:

1. A pneumatically driven electric power generator comprising:

a cylinder having a first end connectable through an inlet flowpath to an air supply passage containing air at a positive pressure, a second end of said cylinder being open;

a piston having a magnetic moment associated therewith, said piston being positionable in a first location wherein at least a first portion of said piston is disposed within said cylinder;

sealing means disposed on at least one of an outer surface of said first portion of said piston and an inner surface of said cylinder to prevent loss of air between said piston and said cylinder and permit air pressure in said cylinder to increase when said first portion of said piston is disposed within said cylinder;

said piston also being positionable in a second location wherein said first portion of said piston is outside of said cylinder so that clearance is provided between said piston and said cylinder so that air may exhaust from said cylinder;

means engaging said piston for biasing said piston from said second position toward said first position so that after said cylinder has substantially exhausted, said piston moves to said first position, whereby said piston oscillates, moving back and forth between said first position and said second position, driven by air supplied through such air supply passage to said cylinder; and

at least one electric coil placed to enclose changing magnetic flux caused by said magnetic moment associated with said piston whereby an emf is generated in said electric coil, so that an external circuit connected to said electric coil receives electric power from said electric coil.

2. A pneumatically driven electric power generator according to claim 1 wherein said sealing means is an O-ring in a groove formed on said outer surface of said first portion of said piston.

3. A pneumatically driven electric power generator according to claim 1 wherein said inlet flowpath includes an air filter for excluding foreign material from said cylinder.

4. A pneumatically driven electric power generator according to claim 1 wherein said inlet flowpath includes a choke to control an impedance of said inlet flowpath.

5. A pneumatically driven electric power generator according to claim 1 wherein said generator further includes:

a cylinder extension at least one of formed integrally with and attached to said cylinder, said cylinder extension having an inner surface having a transverse dimension greater than a transverse dimension of said cylinder, said cylinder extension having an end closure; and

an exhaust passage connected to at least one of said cylinder extension and said end closure.

6. A pneumatically driven electric power generator according to claim 5 wherein said piston further includes a piston extension at least one of formed integrally with and attached to said piston, at least a portion of said piston extension contacting at least a portion of said cylinder extension to provide positional constraint to said piston.

7. A pneumatically driven electric power generator according to claim 6 wherein said portion of said piston extension contacting at least a portion of said cylinder extension is an outer surface of said piston extension and said portion of said cylinder extension is an inner surface of said cylinder extension.

8. A pneumatically driven electric power generator according to claim 7 wherein at least one of said outer surface of said piston extension and said inner surface of said cylinder extension is at least one of made from and coated with a low friction material.

9. A pneumatically driven electric power generator according to claim 6 wherein said piston extension has at least one longitudinal air passage to carry air to an end of said piston

adjacent said end closure, said exhaust being connected to said end closure.

10. A pneumatically driven electric power generator according to claim 9 wherein said at least one longitudinal air passage is a longitudinal slot formed in said outer surface of said piston extension.

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11. A pneumatically driven electric power generator according to claim 1 wherein said means disposed on said pneumatically driven electric power generator for biasing said piston from said second position to said first position is a spring.

12. A pneumatically driven electric power generator according to claim 1 wherein said spring is a compression spring disposed between said piston extension and said end closure.

13. A pneumatically driven electric power generator according to claim 5 wherein said exhaust passage includes a muffler to reduce noise released from said generator.

14. A pneumatically driven electric power generator according to claim 5 wherein said exhaust passage includes an electrically actuated shutoff valve to prevent air flow through said generator, thereby turning off said generator.

15. A pneumatically driven electric power generator according to claim 1 wherein said inlet flowpath includes an electrically actuated shutoff valve to prevent air flow through said generator, thereby turning off said generator.

16. A pneumatically driven electric power generator according to claim 1 wherein said at least one electric coil is connected to a rectifier to supply DC electric power.

17. A pneumatically driven electric power generator according to claim 1 wherein said rectifier is a full bridge rectifier to supply DC electric power whenever a net flux through said at least one electric coil is changing.

18. A pneumatically driven electric power generator according to claim 1 wherein said magnetic moment associated with said piston is provided by a magnet attached to at least one of said piston and said piston extension.

19. A pneumatically driven electric power generator according to claim 1 wherein said magnetic moment associated with said piston is provided by forming at least one of said piston and said piston extension of a material having a magnetic moment.

20. A pneumatically driven electric power generator comprising:

a first cylinder having a first end connectable through a first inlet flowpath to an air supply passage, a second end of said first cylinder being open;

a second cylinder having a first end connectable through a second inlet flowpath to said air supply passage, a second end of said second cylinder being open;

a piston having a magnetic moment associated therewith, said piston having a first end portion and a second end portion, said piston being positionable in a first location wherein said first end portion of said piston is disposed within said first cylinder and said second end portion of said piston is disposed outside of said second cylinder, said piston further being positionable in a second location wherein said second end portion of said piston is disposed within said second cylinder and said first portion of said piston is outside of said first cylinder;

so that when said piston is disposed in said first position, air pressure received in said first cylinder through said first inlet flowpath drives said piston toward said second position, whereupon said first cylinder exhausts, and when said piston is disposed in said second position, air pressure received in said second cylinder through said second inlet flowpath drives said piston toward said first position, whereupon said second cylinder exhausts, so that said piston oscillates; and

at least one electric coil placed to enclose changing magnetic flux caused by said magnetic moment associated with said piston whereby an emf is generated in said electric coil, so that an

external circuit connected to said electric coil receives electric power from said electric coil.

21. A pneumatically driven electric power generator according to claim 20 wherein said generator further includes a spring engaging said piston to bias said piston toward one of said first position and said second position to facilitate starting said generator when air is supplied through said first air supply passage and said second air supply passage.